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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/27/2006

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EXAMINER

NGO, CHUONG A

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/594,646	Applicant(s) ZHANG, HAI	
	Examiner CHUONG A. NGO	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 2,7,18 and 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,9-12,14-17 and 21-25 is/are rejected.
- 7) ☒ Claim(s) 8,13 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 3-6, 9-12, 14-17, 21-25 have been considered but they are not persuasive.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Applicant's arguments with respect to those references combination of Hwang and Alakoski do not teach or suggest at least these features of claim 1.

In contrast to applicant assertion, Examiner very kindly directs the applicant to where Hwang discloses i.e. "verifying, by the SGSN before sending a Create MBMS Context Request, whether the MBMS bearer capabilities of the UE are less than Required MBMS Bearer Capabilities if the SGSN has the Required MBMS Bearer Capabilities, wherein the Required MBMS Bearer Capabilities are used to identify the maximum QoS ability of the MBMS service requested by the UE" (see ¶ [0050], where Hwang discusses the SGSN 440 determines whether the UE 410 is qualified for receiving the corresponding MBMS

service, depending on the initial UE identity included in the received Authentication request message, therefore, SGSN is verifying the capability..., see ¶ [0051], The SGSN 440 transmits an Authentication confirm message to the TRNC 430 along with information indicating whether the UE 410 has qualification for receiving the MBMS service and information on the types of the MBMS services that the UE 410 is currently receiving (Step 417)..
see ¶ [0065], the TRNC 430 determines whether it can continuously provide the requested MBMS service to the UE 410..
see ¶ [0069], .. Upon receiving the MBMS service request message, the SGSN 440 detects an MBMS Service ID included in the MBMS service request message, and transmits an MBMS RAB setup request message to the TRNC 430 in order to set up a radio access bearer (RAB) for transmitting MBMS data corresponding to the detected MBMS Service ID (Step 521)..
therefore, ..therefore, SGSN is verifying radio access bearer capability) and "rejecting, by the SGSN, the request for activating an MBMS Context if the MBMS bearer capabilities of the UE are less than the Required MBMS Bearer Capabilities, or creating the MBMS UE Context if the MBMS bearer capabilities of the UE are not less than the Required MBMS Bearer Capabilities" (see ¶ [0064], .. the SGSN 440 performs an authentication operation on the UE 410, and then transmits an Authentication Confirm message with the authentication result to the TRNC 430 (Step 515)..
and see ¶ [0066], .. the UE 410 has no qualification for receiving the MBMS service, i.e., when

authentication for the UE 410 has failed, the TRNC 430 transmits to the UE 410 an RRC connection reject message including information indicating that the UE 410 is unqualified to receive the MBMS service, notifying that continuous supply of the MBMS service is unavailable..).

However, Hwang does not particularly disclose "Packet Data Protocol (PDP)". In an analogous field of endeavor, attention is directed to Alakoski, which teaches "Packet Data Protocol (PDP)" (see ¶ [0029], **the Gateway GPRS Service Node (GGSN) initiates policy requests at packet data protocol (PDP) context activation or modification.., see ¶ [0032], The MBMS service parameters can be used in the GGSN for setting the accurate QoS profile for the MBMS bearer).**

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was make to modify the Hwang invention, and have Packet Data Protocol (PDP), as taught by Alakoski, thereby, providing the methods to enhancing the network capability to add new feature to the system, as discussed by Alakoski, (see ¶s [0005]-[0008]).

One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., Inc., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

2. The examiner has updated the rejection to further clarify and has not changed the interpretation of the rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication 20040147266 (hereinafter Hwang) in view of US Patent Application Publication 20040073928 (hereinafter Alakoski).

Consider claims 1, 23, Hwang discloses “A method for activating a Multimedia Broadcast/Multicast Service (MBMS) in a network” (**see ¶ [0085], and Fig. 9A**), “the network comprising at least one Serving GPRS Support Node (SGSN) for connecting user equipments (UE) via a radio access network” (**see Fig. 1, Blocks 101, 103**), “at least one GGSN” (**see Fig. 1, Block 105**), and “at least one BM-SC” (**see Fig. 1, Block 106**), “wherein the SGSN and the GGSN are operatively connected while the GGSN and the BM-SC are operatively connected” (**see Fig. 1, Blocks 103, 105, 106**);

the method comprising the steps:

Hwang discloses “Creating by a UE, a request message through interaction with the network and sending a joining message to the network via an SGSN which the UE belongs to” (see ¶ [0064], and Fig. 5, Step 511); and

Hwang discloses “after receiving the joining message, implementing, by the network, an authorization to the UE” (see ¶ [0064], and Fig. 5, Step 513), “if the UE has passed the authorization, permitting the UE to activate an MBMS UE Context” (see ¶ [0045]-[0051], and Fig. 4, Step 411-419, Fig. 5, Step 511-531) and “the UE sending a request for activating an MBMS Context which radio access bearer capability of the UE to the SGSN which the UE belongs to” (see ¶ [0084] and Fig. 9A and 9B, Steps 921,923);

Hwang discloses “verifying, by the SGSN before sending a Create MBMS Context Request, whether the radio access bearer capability of the UE are less than access bearer Capabilities, if the SGSN has the Required radio access bearer capability wherein the Required radio access bearer capability are used to identify the maximum QoS ability of the MBMS service requested by the UE” (see ¶ [0050], where Hwang discloses the SGSN 440 determines whether the UE 410 is qualified for receiving the corresponding MBMS service, depending on the initial UE identity included in the received Authentication request message, therefore, SGSN is verifying the capability..., see ¶ [0051],

The SGSN 440 transmits an Authentication confirm message to the TRNC 430 along with information indicating whether the UE 410 has qualification for receiving the MBMS service and information on the types of the MBMS services that the UE 410 is currently receiving (Step 417).., see ¶ [0065], the TRNC 430 determines whether it can continuously provide the requested MBMS service to the UE 410.., see ¶ [0069], .. Upon receiving the MBMS service request message, the SGSN 440 detects an MBMS Service ID included in the MBMS service request message, and transmits an MBMS RAB setup request message to the TRNC 430 in order to set up a radio access bearer (RAB) for transmitting MBMS data corresponding to the detected MBMS Service ID (Step 521).., therefore, ..therefore, SGSN is verifying radio access bearer capability); and

Hwang discloses “rejecting, by the SGSN, the request for activating an MBMS Context if the MBMS bearer capabilities of the UE are less than the Required MBMS Bearer Capabilities, or creating an the MBMS UE Context if the MBMS bearer capabilities of the UE are not less than the Required MBMS Bearer Capabilities” (see ¶ [0029], the Gateway GPRS Service Node (GGSN) initiates policy requests at packet data protocol (PDP) context activation or modification.., see ¶ [0032], The MBMS service parameters can be used in the GGSN for setting the accurate QoS profile for the MBMS bearer).

Although, Hwang discloses “radio access bearer capability and using message context”, however, Hwang does not particularly disclose “carries MBMS bearer capabilities and using Packet Data Protocol (PDP) Context”. In an analogous field of endeavor, attention is directed to Alakoski, which teaches “carries MBMS bearer capabilities and using Packet Data Protocol (PDP) Context” **(see ¶ [0029], the Gateway GPRS Service Node (GGSN) initiates policy requests at packet data protocol (PDP) context activation or modification..., see ¶ [0032], The MBMS service parameters can be used in the GGSN for setting the accurate QoS profile for the MBMS bearer).**

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was make to modify the Hwang invention, and have carries MBMS bearer capabilities and using Packet Data Protocol (PDP) Context, as taught by Alakoski, thereby, providing the methods to enhancing the network capability to add new feature to the system, as discussed by Alakoski, (see ¶s [0005]-[0008]).

Consider claim 24, “a fourth unit, adapted to send a rejection message which carries a rejection reason to the UE” **(see Hwang, ¶ [0051], Fig. 4, the TRNC 430 analyzes information included in the received Authentication confirm message, and transmits an RRC connection reject message to the UE 410).**

Consider claim 25, “a fifth unit, adapted to send a failure message which carries a failure reason to a Gateway GPRS Support Node (GGSN)” **(see Hwang, ¶ [0007], Fig. 1, a gateway GPRS support node (GGSN) 105).**

5. Claims 3-6, 9-12, 14-17, 21, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication 20040147266 (hereinafter Hwang) in view of US Patent Application Publication 20040073928 (hereinafter Alakoski) and further in view of US Patent Application Publication 20040266440 (hereinafter Fuchs).

Consider claims 3, 4, Hwang and Alakoski disclose multicast, however, Hwang and Alakoski do not particularly disclose “an IP multicast access of a unicast mode”. However, attention is directed to Fuchs, which teaches “an IP multicast access of a unicast mode” **(see ¶ [0062], The IP addresses receiving cellular multicast handling may include a subset of IP multicast addresses and/or a group of IP unicast addresses).**

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the Hwang and Alakoski inventions, and have an IP multicast access of a unicast mode, as taught by Fuchs, thereby, providing the method for improving bandwidth in mobile system, as discussed by Fuchs, **(see ¶ [0003]-[0009]).**

Consider claims 5 and 6 have limitations similar to those treated in the above rejection(s), and are met by the references as discussed above.

Also see Hwang, ¶ [0051], .. The SGSN 440 transmits an Authentication confirm message to the TRNC 430 along with information indicating whether the UE 410 has qualification for receiving the MBMS service and information on the types of the MBMS services that the UE 410 is currently receiving (Step 417)..).

Consider claim 9, Hwang discloses “activating a timer after the step a2 of sending the message which carries the MBMS bearer capabilities of the UE, stopping the timer if the UE receives an accepting message or the GGSN returns back to the IP multicast access of the unicast mode before Ume-out of the timer, and reapplying to receive the MBMS bearer service through the unicast mode if the timer being overtime” **(see ¶ [0054], where Hwang discusses all the time required to connection setup and connection reject).**

Consider claim 10, “wherein the rejection message carries the Required MBMS Bearer Capabilities, the UE compares the Required MBMS Bearer Capabilities with the MBMS bearer capabilities of the UE after receiving the rejection message” **(see Alakoski, ¶ [0029], the Gateway GPRS Service Node (GGSN) initiates policy requests at packet data protocol (PDP) context activation or modification..., see ¶ [0032], The MBMS service parameters can be used in the GGSN for**

setting the accurate QoS profile for the MBMS bearer), and “the UE reapplies to receive the MBMS bearer service through the unicast mode if the MBMS bearer capabilities of the UE are less than the Required MBMS Bearer Capabilities” (see Fuchs, ¶ [0062], The IP addresses receiving cellular multicast handling may include a subset of IP multicast addresses and/or a group of IP unicast addresses).

Consider claims 11, 15, 21, “wherein the rejection message carries the Required MBMS Bearer Capabilities, the UE compares the Required MBMS Bearer Capabilities with the MBMS bearer capabilities of the UE after receiving the rejection message” **(see Hwang, ¶ [0052], The RRC connection reject message is a message used when a UTRAN (UMTS (Universal Mobile Telecommunications System) Radio Access Network) rejects an RRC connection requested by a UE), and “the UE reapplies to receive the MBMS bearer service through the unicast mode if the MBMS bearer capabilities of the UE are less than the Required MBMS Bearer Capabilities and the GGSN does not return back to the IP mutticast access of the a unicast mode” (see Fuchs, ¶ [0062], The IP addresses receiving cellular multicast handling may include a subset of IP multicast addresses and/or a group of IP unicast addresses).**

Consider claims 12, 16, “wherein in the Step b, if the SGSN has not the Required MBMS Bearer Capabilities and if the MBMS bearer capabilities of the UE are less than the Required MBMS Bearer

Capabilities, the SGSN deactivates the created MBMS UE Context, and sends a failure message to a GGSN; the GGSN receives the failure message and decides whether to return back to an IP multicast access of a unicast mode” (see Hwang, ¶ [0087], .. when the UE 910 fails to receive messages for the RRC connection for a predetermined time in an RRC connection state.., the UE 910 notifies release of an RRC connection by transmitting an RRC connection release confirm message to the SRNC 920 (Step 927)).

Consider claim 14, “wherein the SGSN sends the failure message to the GGSN which creates a PDP Context with the UE, or to the GGSN which creates an MBMS UE Context with the UE” (see Alakoski , ¶ [0029], the Gateway GPRS Service Node (GGSN) initiates policy requests at packet data protocol (PDP) context activation or modification.., see ¶ [0032], The MBMS service parameters can be used in the GGSN for setting the accurate QoS profile for the MBMS bearer).

Consider claim 17, “wherein the rejection message sent from the SGSN to the UE carries the Required MBMS Bearer Capabilities; the UE compares the Required MBMS Bearer Capabilities with the MBMS bearer capabilities of the UE after receiving the rejection message” (see Hwang, ¶ [0052], The RRC connection reject message is a message used when a UTRAN (UMTS (Universal Mobile Telecommunications

System) Radio Access Network) rejects an RRC connection requested by a UE), and the UE reapplies to receive the MBMS bearer service through the unicast mode if the MBMS bearer capabilities of the UE are less than the Required MBMS Bearer Capabilities” (see Fuchs, ¶ [0062], The IP addresses receiving cellular multicast handling may include a subset of IP multicast addresses and/or a group of IP unicast addresses).

Consider claim 22, “further comprising: sending a rejection message to the UE if the MBMS bearer capabilities of the UE are less than the Required MBMS Bearer Capabilities” (see Hwang, ¶ [0052], **The RRC connection reject message is a message used when a UTRAN (UMTS (Universal Mobile Telecommunications System) Radio Access Network) rejects an RRC connection requested by a UE).**

Allowable Subject Matter

6. Claims 8, 13, 20 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- i. 20040085926.
- ii. 20070201430.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUONG A. NGO whose telephone number is 571-270-7264. The examiner can normally be reached on Monday through Thursday 6:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on 571-272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CHUONG A NGO/
Examiner, Art Unit 2617

/KAMRAN AFSHAR/

Primary Examiner, Art Unit 2617